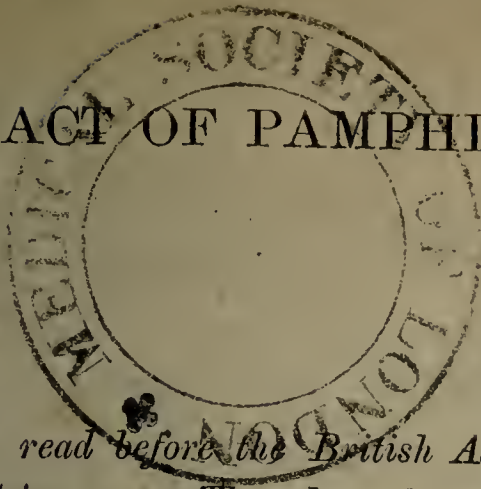


[ABSTRACT OF PAMPHLET.]



[Abstract of a Paper read before the British Association for the Advancement of Science, on Thursday, the 8th of September, 1853.]

THE
RESULTS
OF THE
CENSUS OF GREAT BRITAIN
IN
1851;

WITH A DESCRIPTION OF THE
MACHINERY AND PROCESSES
EMPLOYED TO OBTAIN THE RETURNS.

BY
EDWARD CHESHIRE.

The Results of the Census of Great Britain in 1851, with a Description of the Machinery and Processes employed to obtain the Returns.
By EDWARD CHESHIRE.

[*Abstract* of a Paper read before the British Association for the Advancement of Science, on Thursday, the 8th of September, 1853.]

(From the *Athenæum*.)

THE author commenced by reciting the onerous duties of the Registrar General. The objects of the census were explained, and the machinery employed to take it. Great Britain was apportioned into 38,740 enumeration districts, and to each of them a duly qualified enumerator was appointed. The author illustrated the extent of this army of enumerators, and the labour of engaging their services on the same day, by stating that it would take $13\frac{1}{2}$ hours to count them, at the rate of one a second, and that the army recently encamped at Chobham would not have sufficed to enumerate a *fourth* of the population of Great Britain. The boundaries of the enumeration districts, and the duties of the enumerators, were defined. The number of householders' schedules forwarded from the Census Office was 7,000,000, weighing 40 tons. The processes employed to enumerate persons sleeping in barns, tents, and the open air, and in vessels, were severally explained: also the means by which the numbers of British subjects in foreign States were obtained. The precautions taken to secure accurate returns were recited; they involved the final process of a minute examination and totaling at the Census Office, of 20 millions of entries, contained on upwards of $1\frac{1}{4}$ millions of pages of the enumerators' books. The latter were upwards of 38,000 in number. The boundaries of the fourteen registration divisions were traced, and the plan of publication of the census was explained. The number of persons absent from Great Britain on the night of the 30th of March, 1851, was nearly 200,000:—viz., army, navy, and merchant service, 162,490; and British subjects resident and travelling in foreign countries, 33,775. The various causes of displacements of the population were recited: and the general movement of the population on the occasion of the Great Exhibition was alluded to.* The number of *visits* to the Crystal Palace were 6,039,195,—and the number of *people* who visited it was 2,000,000; nevertheless, the landing of only 65,233 aliens was reported in the year. The population of Great Britain in 1851 is subjoined:—

	Males.	Females.	Total.
England 	8,281,734	8,640,154	16,921,888
Scotland 	1,375,479	1,513,263	2,888,742
Wales 	499,491	506,230	1,005,721
Islands 	66,854	76,272	143,126
Army, Navy, and Merchant Service 	162,490	.....	162,490
Total 	10,386,048	10,735,919	21,121,967

* It is stated incidentally in the census, that in 1845 a million and a half of people on the Continent visited, in pilgrimage, the *Holy Coat* at Trèves.

The census illustrated this 21,000,000 of people by an allusion to the Great Exhibition. On one or two occasions 100,000 persons visited the Crystal Palace in a single day, consequently 211 days of such a living stream would represent the number of the British population. Another way of realizing 21,000,000 of people was arrived at by considering their numbers in relation to space: allowing a square yard to each person they would cover 7 *square miles*. The author supplied a further illustration, by stating that if all the people of Great Britain had to pass through London in procession, 4 abreast, and every facility was afforded for their free and uninterrupted passage for 12 hours daily, Sundays excepted, it would take nearly 3 *months* for the whole population of Great Britain to file through at *quick* march, *four* deep. The excess of females in Great Britain was 512,361, or as many as would have filled the Crystal Palace 5 times over. The proportion between the sexes was 100 males to every 105 females, a remarkable fact when it was considered that the births during the last 13 years had given the reversed proportion of 105 *boys* to 100 *girls*. The annexed statement exhibits the population of Great Britain at each census from 1801 to 1851 inclusive:—

Years.				Males.	Females.	Total.
1801	....	....		5,368,703	5,548,730	10,917,433
1811	....	....	....	6,111,261	6,312,859	12,424,120
1821	....	....		7,096,053	7,306,590	14,402,643
1831	....	....	....	8,133,446	8,430,692	16,564,138
1841	....	....		9,232,418	9,581,368	18,813,786
1851	....	....	....	10,386,048	10,735,919	21,121,967

The increase of population in the last half century was upwards of 10,000,000, and nearly equalled the increase in all preceding ages, notwithstanding that millions had emigrated in the interval. The increase still continued, but the *rate* of increase had declined, chiefly from accelerated emigration. At the rate of increase prevailing from 1801 to 1851, the population would double itself in 52½ years. The relation of population to mean lifetime and to interval between generations was then discussed. The effects of fertile marriages and of early marriages, respectively, were stated; also the result of a change in the social condition of unmarried women; likewise the effect of migration and emigration, respectively, on population; the effect of an abundance of the necessaries of life was indicated, and, on the contrary, the result of famines, pestilences, and public calamities. The terms “family” and “occupier” were defined, and some remarks by Dr. Carus, on English dwellings, were cited. The English (says the Doctor) divide their edifices *perpendicularly* in houses, while on the Continent and in many parts of Scotland the edifices are divided *horizontally* into floors. The definition of a “house,” adopted for the purposes of the census, was, “isolated dwellings or dwellings separated by party walls.” The following table gives the number of houses in Great Britain in 1851:—

	Inhabited.	Uninhabited.	Building.
England	3,076,620	144,499	25,192
Scotland	370,308	12,146	2,420
Wales	201,419	8,995	1,379
Islands	21,845	1,095	203
Total	3,670,192	166,735	29,194

About 4 per cent of the houses in Great Britain were unoccupied in 1851, and to every 131 houses inhabited or uninhabited there was *one* in course of erection. In England and Wales the number of persons to a house was 5·5; in Scotland 7·8, or about the same as in London; in Edinburgh and Glasgow the numbers were respectively 20·6 and 27·5. Subjoined is a statement of the number of inhabited houses and families in Great Britain at each census, from 1801 to 1851,—also of persons to a house, excluding the Islands in the British seas:—

Years.	Inhabited Houses.	Families.	Persons to a House.
1801	1,870,476	2,260,802	5·6
1811	2,101,597	2,544,215	5·7
1821	2,429,630	2,941,383	5·8
1831	2,850,937	3,414,175	5·7
1841	3,446,797	(No returns.)	5·4
1851	3,648,347	4,312,388	5·7

The number of inhabited houses had nearly doubled in the last half century, and upwards of two million new families had been founded. 67,609 families, taken at hazard, were analyzed into their constituent parts, and they gave some curious results. About 5 per cent only of the families in Great Britain consisted of husband, wife, children, and servants, generally considered the requisites of domestic felicity; while 893 families had each *ten* children at home, 317 had each *eleven*, and 64 had each *twelve*. The number of each class of institution, and the number of persons inhabiting them, are annexed:—

Class of Institution.	Number of Institutions.	Number of Persons Inhabiting them.		
		Males.	Females.	Total.
Barracks	174	44,833	9,100	53,933
Workhouses	746	65,786	65,796	131,582
Prisons	257	24,593	6,366	30,959
Lunatic Asylums	149	9,753	11,251	21,004
Hospitals	118	5,893	5,754	11,647
Asylums, &c.	573	27,183	19,548	46,731
Total	2,017	178,041	117,815	295,856

Of these, 295,856 persons, 260,340 were inmates, and 35,516 officers and servants. The excess of males in the prisons arose from the fact that crime was four times as prevalent among males as among females. The number of houseless classes, *i. e.* of persons sleeping in barns, tents, and the open air, on the night of the census, was 18,249. The following table gives the number of these classes, together with those sleeping in barges and vessels :—

Persons sleeping in	Males.	Females. .	Total.
Barges	10,395	2,529	12,924
Barns	7,251	2,721	9,972
Tents or Open Air	4,614	3,663	8,277
Vessels	48,895	2,853	51,748
Total	71,155	11,766	82,921

It was mentioned as a curious trait of gipsy feeling that a whole tribe struck their tents, and passed into another parish, in order to escape enumeration. The composition of a town was next described; also, the laws of operating upon the location of families. The number of cities and towns of various magnitudes in Great Britain was 815 :—viz. 580 in England and Wales, 225 in Scotland, and 10 in the Channel Islands. The town and country population was equally balanced :— $10\frac{1}{2}$ millions against $10\frac{1}{2}$ millions. The density in the towns was 3,337 persons to the square mile; in the country only 120. The average population of each town in England and Wales was 15,500; of each town in Scotland 6,654. The average ground area of the English town was $4\frac{3}{5}$ miles. The manner in which the ground area in Great Britain was occupied by the population was illustrated by a series of squares. The adventitious character of certain towns was alluded to; many had risen rapidly from villages to cities, and had almost acquired a metropolitan character. In 1851 Great Britain contained 70 towns, of 20,000 inhabitants and upwards. There was an increasing tendency of the people to concentrate themselves in masses. London extended over an area of 78,029 acres, or 122 square miles, and the number of its inhabitants, rapidly increasing, was 2,362,236 on the day of the last census. The author illustrated this number by a curious calculation :—a conception of this vast mass of people might be formed by the fact, that if the metropolis was surrounded by a wall, having a north gate, a south gate, an east gate, and a west gate, and each of the four gates was of sufficient width to allow a column of persons to pass out freely *four* abreast, and a peremptory necessity required the immediate evacuation of the city, it could not be accomplished under *four-and-twenty* hours, by the expiration of which time the head of each of the four columns would have advanced a no less distance than *seventy-five* miles from their respective gates, all the people being in *close file*, *four* deep. In respect to the density or proximity of the population, a French writer had suggested the term “specific population,” after the analogy of “specific gravity,” in lieu of the terms in common use, “thinly populated” and “populous.”

The statement annexed exhibits the area of Great Britain in acres and square miles, the square in miles, the number of acres to a person, of persons to a square mile, and the mean proximity of the population on the hypothesis of an equal distribution :—

	Area		Square (in miles.)	Acres to a Person.	Persons to a sq. mile.	Proximity of Persons in yards.
	In acres.	In sq miles.				
England	32,590,429	50,922	226	1·9	332	104
Scotland	20,047,462	31,324	177	6·9	92	197
Wales	4,734,486	7,398	86	4·7	135	162
Islands	252,000	394	20	1·8	363	99
Great Britain	57,624,377	90,038	299	2·7	233	124

The 624 districts of England and Wales, classed in an order of density, ranged from 18 persons to the square mile in Northumberland, to 185,751 in the East London district. In all London there were 19,375 persons to the square mile. In 1801 the people of England were on an average 153 yards asunder, in 1851 only 108 yards. The mean distance between their houses in 1801 was 362 yards, in 1851 only 252 yards. In London the mean proximity in 1801 was 21 yards, in 1851 only 14 yards. The number of islands in the British group were stated at 500, but inhabitants were only found on 175 on the day of the census. The early history of the more celebrated of the islands was given. The population of the chief of the group, Great Britain, had been given. Ireland contained 6,553,357 inhabitants; Anglesey, the next most populous island, had 57,318 inhabitants; Jersey, 57,020; the Isle of Man, 52,344; the Isle of Wight, 50,324; Guernsey, 29,757; eight islands ranged from 22,918 to 5,857, 17 from 4,006 to 1,064, 52 from 947 to 105, and the remaining 92, downwards to an island inhabited by one solitary man. The shires, hundreds, and tythings, were traced to Alfred the Great; the circuits to Henry the Second. The terms "hundreds" and "tythings" had their origin in a system of numeration. The number of reformed boroughs in England and Wales were 196, and contained a population of 4,345,269 inhabitants. Scotland contained 83 royal and municipal burghs, having a population of 752,777 inhabitants. The difficulty of tracing the boundaries of the *ecclesiastical* districts, and consequently of ascertaining correctly their population, was shown. The changes in the ancient boundaries of counties and other divisions were alluded to, and the paper concluded with a general summary of the results of the census. An appendix contained tables, showing the population and number of houses, distinguishing whether inhabited, uninhabited, or building, in England, Scotland, Wales, and the Islands, respectively, at each census from 1801 to 1851; the same, in 1851, for each of the 14 registration divisions; for each of the 36 districts of London; and for each county in England and Wales, and in Scotland; also the population

of each county in England and Wales, and in Scotland, at each census from 1801 to 1851, and the increase of population in the last half century; the area in acres and square miles, the number of persons to a square mile, of acres to a person, of inhabited houses to a square mile, and of persons to a house, for each county in England and Wales, and in Scotland; the population and number of inhabited houses in the counties, and parliamentary divisions of counties, in England and Wales, and in the counties of Scotland, including and excluding represented cities and boroughs or burghs, also the number of members returned; the population of each island containing above 100 persons; the population and number of inhabited houses in *each* of the 815 cities, boroughs, and principal towns in England and Wales and in Scotland, distinguishing the municipal and parliamentary limits; the number of each class of public institutions in England and Wales, Scotland, and the Islands, and the number of persons inhabiting them; the number of births and deaths, and the excess of births over deaths, in England and Wales, for each of the ten years of 1841-50; and finally, the number of persons who had emigrated from Great Britain and Ireland in each year from 1843 to 1852 inclusive, and the destination of the emigrants.